THE INVENTION CLAIMED IS:

1. An alignment device adapted to laterally urge a substrate supported on a support stage so as to cause the substrate to slide relative to the support stage, comprising:

a first pusher adapted to contact an edge of a substrate supported on the support stage and to laterally translate along a first path of translation;

a second pusher adapted to contact the edge of the substrate and to laterally translate along a second path of translation, the second path of translation being at an angle to the first path of translation and intersecting the first path at a path intersection;

a frame to which the first and second pushers are movably coupled, the frame adapted to maintain the first and second pushers at an elevation of the edge of the substrate supported on the support stage;

a first biasing element coupled between the first pusher and the frame and adapted to bias the first pusher against the edge of the substrate; and

a second biasing element coupled between the second pusher and the frame and adapted to bias the second pusher against the edge of the substrate independent of the biasing of the first pusher.

2. The alignment device of claim 1, wherein at least a portion of the second path of translation is perpendicular to at least a portion of the first path of translation.

3. The alignment device of claim 1, further comprising a pusher retraction device adapted to cause at least one of the first and second pushers to move away from the support stage.

4. The alignment device of claim 3, wherein the pusher retraction device is further adapted to cause both the first and the second pushers to move away from the support stage.

5. The alignment device of claim 1 wherein the first and second pushers are adapted to laterally translate relative to the frame.

6. The alignment device of claim 1 further comprising:

a first guide shaft adapted to define the first path of translation; and

a second guide shaft adapted to define the second path of translation.

7. The alignment device of claim 1 further comprising:

a first pusher support coupled to the first pusher and movably coupled to the frame and adapted to move along the first path of translation;

a second pusher support coupled to the second pusher and movably coupled to the frame and adapted to move along the second path of translation;

a first stop plate coupled to the frame and adapted to limit movement of the first pusher support along the first path of translation away from the support stage; and

a second stop plate coupled to the frame and adapted to limit movement of the second pusher support along the second path of translation away from the support stage.

8. The alignment device of claim 1 wherein the first and second pushers are further adapted to allow the

substrate to be loaded onto the support stage by translating away from the support stage.

9. The alignment device of claim 8 further comprising:

a first pusher support coupled to the first pusher and movably coupled to the frame and adapted to move along the first path of translation;

a second pusher support coupled to the second pusher and movably coupled to the frame and adapted to move along the second path of translation;

a first spacing mechanism adapted to establish a limit to which the first pusher support may move along the guide shaft toward the support stage; and

a second spacing mechanism adapted to establish a limit to which the second pusher support may move along the guide shaft toward the support stage.

10. The alignment device of claim 1 further comprising:

a first pusher support coupled to the first pusher and movably coupled to the frame and adapted to move along the first path of translation;

a second pusher support coupled to the second pusher and movably coupled to the frame and adapted to move along the second path of translation; and

a plunger adapted to urge the first and second pusher supports away from the support stage.

11. A substrate calibration system, comprising:

a plurality of alignment devices arranged in a spaced relation around a support stage, wherein each of the plurality of alignment devices comprises:

a first pusher adapted to contact an edge of a substrate supported on the support stage and to laterally translate along a first path of translation;

a second pusher adapted to contact the edge of the substrate and to laterally translate along a second path of translation, the second path of translation being at an angle to the first path of translation and intersecting the first path at a path intersection;

a frame to which the first and second pushers are movably coupled, the frame adapted to maintain the first and second pushers at an elevation of the edge of the substrate supported on the support stage;

a first biasing element coupled between the first pusher and the frame and adapted to bias the first pusher against the edge of the substrate; and

a second biasing element coupled between the second pusher and the frame and adapted to bias the second pusher against the edge of the substrate independent of the biasing of the first pusher.

12. The substrate calibration system of claim 11 wherein each of the plurality of alignment devices is positioned adjacent a corner of the support stage.

13. The substrate calibration system of claim 11 wherein the plurality of alignment devices are adapted to align the substrate with an x-y coordinate system of the support stage by confining the substrate within a perimeter defined by the first and second pushers of the plurality of alignment devices.

14. A method of laterally sliding a substrate relative to a support stage, comprising:

supporting a substrate with a support stage;

providing at least one alignment device comprising:

a first pusher adapted to contact an edge of the substrate supported on the support stage and to laterally translate along a first path of translation;

a second pusher adapted to contact the edge of the substrate and to laterally translate along a second path of translation, the second path of translation being at an angle to the first path of translation and intersecting the first path at a path intersection;

a frame to which the first and second pushers are movably coupled, the frame adapted to maintain the first and second pushers at an elevation of the edge of the substrate supported on the support stage;

a first biasing element coupled between the first pusher and the frame and adapted to bias the first pusher against the edge of the substrate; and

a second biasing element coupled between the second pusher and the frame and adapted to bias the second pusher against the edge of the substrate independent of the biasing of the first pusher;

causing the first pusher to contact and apply a first pushing force to the edge of the substrate, the first pushing force being directed along the first path of translation; and

causing the second pusher to contact and apply a second pushing force to the edge of the substrate, the second pushing force being directed along the second path of translation.

15. The method of claim 14 wherein at least a portion of the second path of translation is perpendicular to at least a portion of the first path of translation.

16. The method of claim 14 further comprising causing at least one of the first and second pushers to move away from the support stage.

17. The method of claim 14 further comprising employing the alignment device to calibrate the substrate relative to the support stage.

18. The method of claim 17 wherein calibrating the substrate relative to the support stage includes aligning the edge of the substrate with an x-y coordinate system of the support stage.

19. The method of claim 14 wherein providing at least one alignment device includes providing a plurality of alignment devices; and

further comprising confining the substrate within a perimeter defined by the first and second pushers of the plurality of alignment devices.